

## GENERAL NOTE

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### AGLAIS URTICAE (NYMPHALIDAE): A NASCENT POPULATION IN NORTH AMERICA

**Additional key words:** introduction, Eurasian, *Urtica dioica*, New York.

*Aglais urticae* (Linnaeus), the small tortoiseshell, is one of Europe's most widespread and well-known butterflies (Thompson 1980). It was reportedly collected in the last century in the vicinity of Albany, New York (Emmons 1884), but there is reason to doubt this record (McCabe 1990). A second report was of a male that emerged from a crate of books shipped from England to Halifax, Nova Scotia (Scott & Wright 1972). Most recently, an individual of this species was collected in downtown Albany, New York on 19 October 1987 (McCabe 1990).

On 31 August 1988, two rangers of the Jamaica Bay Wildlife Refuge (a unit of Gateway National Recreation Area) in Queens, New York, noticed an unusual butterfly nectaring at bouncing bets (*Saponaria officinalis*) near the park headquarters. The butterfly, an *A. urticae*, was netted, photographed by Don Riepe, and released. It remained in the area and was seen again on 2 September 1988.



FIG. 1. *Aglais urticae* at the Jamaica Bay Wildlife Refuge, Queens, New York, 25 August 1991. Photograph by Don Riepe.

On 15 October 1990 an individual of *A. urticae* was observed at Riverside Park in Manhattan, New York (Nick Wagerik, pers. comm.). The extensive flower gardens in this park attract many late season southern immigrants. Although the butterfly was not photographed, it was studied carefully at close range with binoculars, thus confirming its identity.

On 25 August 1991 another individual was observed at the Jamaica Bay Wildlife Refuge. This individual was seen by a number of people including Steve Walter, John Zuzworsky, and Don Riepe who again was able to secure a photograph (see Fig. 1).

These sightings could represent independent introductions of this butterfly into the United States but this seems unlikely. A large number of individuals of this species is likely to be present in the Hudson River Valley in order to produce four sightings in five years by the relatively few observers covering this large area. A simpler explanation is that *A. urticae* has colonized the Hudson River Valley and surrounding area. The larval foodplant of *A. urticae* in Eurasia is stinging nettle (*Urtica dioica* var. *dioica*; Urticaceae) (Dal 1982, Henriksen & Kreutzer 1982, Thompson 1980, Brooks & Knight 1982) which is now established throughout the northeastern United States (Gleason & Cronquist 1991).

*Aglais urticae* is known to overwinter as an adult, sometimes indoors (Dal 1982). A related species of nymphalid has been reported to sometimes overwinter communally (Proctor 1976). Thus it is plausible that a gravid female, or a male and a female together, were introduced accidentally into the United States. North America may prove to be fertile territory for this butterfly.

Two other well-known Eurasian species of butterflies have become established in North America. *Pieris rapae* (Linnaeus) (Pieridae), the cabbage white, was first found at Quebec in 1860 and at New York in 1868 (Scudder 1889). From these beachheads it rapidly spread across North America (Scudder 1889) and is now perhaps our most ubiquitous butterfly. *Thymelicus lineola* (Ochsenheimer) (Hesperiidae), the European skipper, was first recorded in North America from London, Ontario, Canada in 1910. It now occurs abundantly over much of the northeastern United States and adjacent Canada as well as in British Columbia (Burns 1966). For both of these species, the exact manner of introduction is unknown.

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